PROBLEM STATEMENT

Data collection and analysis can be time-consuming, cumbersome and difficult to monitor. Paper-based assessments require a great deal of dedicated human capacity to design questionnaires, collect data, consolidate completed forms, enter data, and analyze results. A simple one-page assessment can require days of dedicated data entry alone. In the context of humanitarian work—and emergency response in particular—time is an invaluable commodity that should not be wasted on inefficient processes that have proven, cost effective alternatives. Even in less time sensitive environments, controlling the quality of information gathered remains a particular challenge. Data from paper-based assessments is not easy to compile or view as it is collected, meaning one rarely has the ability to review collected information in time to identify and rectify gaps or errors in data.

With the advent of low-cost mobile data collection tools, many organizations are transitioning away from paper-based data collection to digital means. Basic cost-benefit analysis shows the use of mobile-based data collection (MDC) tools can drastically reduce administrative overhead and operational complexity. MDC also provides greater visibility onto the activity of individual data collectors (i.e. remote management), providing an element of ongoing quality assurance both in terms of data and survey methods.

PCMMA is a new assessment methodology, however, with adapted guidance and approaches based on existing EMMA guidelines. To date, MDC has not been used widely in EMMAs/PCMMAs, if at all, as there are some valid practical concerns about its relevance for rapid market assessments. In particular, EMMAs have traditionally relied on an assortment of semi-structured questionnaires that are tailored for the specific assessment and relatively small sample sizes, whereas MDC's value add is most clear when supporting studies that involve large sample sizes and well-structured questionnaires. There is certainly room, however, to make data collection and management more efficient during PCMMA/EMMA. As the IRC and other organizations pilot the PCMMA approach, there is opportunity to explore alternative support tools throughout the process, including various applications of basic information and communication technologies (ICT).

The obvious starting point for ICT integration within PCMMA is mobile data collection. In particular, mobile data collection in support of household and/or vendor interviews, which involve relatively large sample sizes (relative to EMMA/PCMMA at least). A second area to explore regards the automation or operationalization of various report deliverables, including baseline and emergency market maps or seasonal calendars. This report covers lessons learned from piloting mobile data collection during a PCMMA study conducted by the IRC in Niger in June-July 2015. It also provides some general guidance and recommendations for those looking to employ MDC in EMMA/ PCMMA.

APPROACH

MDC is fairly new for many organizations. It requires a keen eye for minute technical details as well as consistent adaptability in terms of project management in order to seamlessly fit into exsiting operational processes—and in the case of PCMMA—within processes that are themselves being piloted. Over time, personal best practices emerge in terms of "building" mobile forms, sequencing refinment activities with staff, and training new mobile users.

While digital forms attempt to replicate paper forms as closely as possible, some adjustments must be made to questionnaires in order to better fit the mobile data collection format. These changes may include: reordering questions, converting question types to limit free text entry, or separating / combining multiple questionnaires to reduce overlapping data collection. One's ability to "translate to digital" improves as h/she gains more experience building and refining forms with subject matter experts. Reviewing existing mobile forms alongside collected data makes it even more apparent how these tools are structured and work end-to-end.

It is also important to note that the transition to digital forms is a collaborative and iterative process. Team leaders (i.e. survey designers) and data collectors (i.e field staff) should expect to weigh in and contribute throughout the development process. The overall timeline for conducting a PCMMA is thus affected by the decision to "go mobile." It cannot be stressed how important ongoing feedback is in the mobile data collection process. If digital forms are not constructed properly from the outset, it affects both data quality and sustained user adoption. The former obviously makes data analysis that much more cumbersome; the latter means that poorly designed forms (or trainings) discourage use at all user levels—from mobile data collector to data analyst.

Prior to collecting real data in a live setting, there must be enough time to thoroughly test all questions and form flows on the mobile device to ensure relevant data points are being captured in logical manner for both data collectors and analysts. More importantly, time must be set aside to observe how mobile users enter data upon initial use to ensure forms are being filled out and submitted correctly. As with paper-based questionnaires, user feedback is critical to designing a quality form that is clearly understood and accurately completed. This is doubly important if supporting inexperienced mobile users, as the entire process—from device management to data entry—is new. Soliciting feedback also helps secure buy-in to ensure that users are confident using new mobile tools on all fronts.

Steps to Mobile Data Collection

Pre-Assessment / Remote

1. **Ensure staff capacity and feasibility of MDC within context**
    - Some cultural & security contexts do not look favorably upon MDC (e.g., Pakistan, Somalia). Confer the acceptability of mobile-based data collection with local sources before any final decision is made to use MDC for a PCMMA.
    - ***Who:*** *PCMMA Team Lead, Host Country Program Leadership*

2. **Identify MDC Manager for field-based work**
    - To build / refine forms, conduct trainings, manage / distribute incoming raw data, troubleshoot mobile devices / platform.
    - This person does not have to hold an independent position focused solely on ICT, but rather the responsibilities outlined above must be delegated accordingly in order to ensure consistency and completion of necessary tasks.
    - ***Who:*** *PCMMA Team Lead, Host Country Program Leadership*

3. **Select mobile platform / MDC tool based on capacity, context, familiarity, usability**
    - All MDC tools are open source[1] and based on the Open Data Kit (ODK) framework (which itself is Excel-based)
    - Choose MDC platform based on MOBILE USERS' preferences. Nearly all freely available

[1] ***Open Source*** denotes software for which the original source code is made freely available and may be redistributed and modified. Microsoft Word, for example, is *not* open source.

data collection tools export Excel-based data similarly. While some platforms may be considered more intuitive than others, tool selection should ultimately depend on what mobile users (data collectors) find most comfortable. If these field preferences are not accounted for, one risks misuse of mobile data collection tools or no use at all.

- ***Who:*** *MDC Manager, PCMMA Team Leads, Field Staff*

In-Field

4. **Finalize paper-based surveys**
   - Good quality paper questionnaires translate to good quality mobile-based questionnaires. If the content of the assessment itself is poorly designed, the introduction of MDC will only exacerbate poor quality. All respective parties (including data collectors) should thus be comfortable with the forms on paper before any digitization occurs.
   - Though understandably difficult given the evolving nature of PCMMA schedules, it is recommended to ***set a clear date for when all forms must be in stable state***. It is expected that forms will evolve in structure and/or content as they are field tested. The MDC Manager must have enough lead-time prior to this date, however, to build & refine forms in an effective, inclusive manner ahead of active use of digital forms in field.
   - ***Who:*** *PCMMA Team Leads*

5. **Select surveys to be digitized**
   - MDC Manager reviews survey & confirms form structure / question types with survey author(s). Potential adjustments from paper to digital include combining surveys that contain duplicate questions and adjusting wording of questions to reduce entry error.
   - The timing of this step is crucial as once forms are digitized, the MDC manager must have enough time to iterate with survey authors and mobile users as well as trial forms in field. The less time left to trial and test forms on mobile, the more likely there will be errors within the form (both technical and substantive).
   - ***Who:*** *PCMMA Team Leads, MDC Manager*

6. **Digitize Forms for mobile**
   - While a paper form may only be 20 questions long, the digital version requires additional lines of instruction and/or logic to be added in order to increase user-friendliness. As such, a seemingly simple paper form may actually be quite complex to build pending the logical dependencies, calculations, and/or syntax the form uses.
   - As noted in steps above—the more lead time the MDC Manager has to design and build mobile forms initially, the less time it will take to refine down line.
   - ***Who:*** *MDC Manager*

7. **Test & refine forms on mobile**
   - Once the initial versions of "digital forms" are complete, they must be reviewed and field tested. Before field testing begins, Team Leaders should thoroughly work through every aspect of a form to confirm question wording, order, test embedded skip logic / calculations, and ensure general usability. Field staff are also encouraged to role play using the mobile forms, completing forms as they would during the actual assessment. This is to both review content as described above as well as to start familiarizing themselves with the questionnaire.
   - This is also an opportunity to catch any technical errors or "bugs" within the form. As various users work through the forms, they should inform the MDC Manager of any bugs to fix. Once all feedback and bugs are consolidated, the MDC Manager refines mobile form versions to match.
   - ***Who:*** *PCMMA Team Leads, MDC Manager*

8. **Deploy <u>Mobile Data Collection v1.0</u>**
   - Update all forms on mobile phones in preparation of field testing
   - ***Who:*** *MDC Manager*

9. **Field Test Digital Forms (MDC v1.0)**
    - Once mobile forms are considered complete, it is important to field test with intended mobile users. Ideally, the forms are intuitive enough that little instruction must be given to fill out the forms themselves. This process, however, always uncovers necessary changes to the questionnaire design and/or content that will need to be fed back into the MDC platform.
    - ***Who:*** *PCMMA Team Leads, Field Staff, MDC Manager*

10. **Refine Forms & Update devices (MDC v1.1…v1.x)**
    - See Steps 7 - 9
    - Repeat Step 10 as needed until all parties have confirmed final versions of forms
    - ***Who:*** *PCMMA Team Leads, Field Staff, MDC Manager*

11. **Train Mobile Users**
    - Depending on field staff's capacity and past experience with MDC, they will need to be trained on the mobile device & the forms themselves. This includes going over basic mobile device maintenance (e.g. having settings set to save battery life), walking through each form question, and instructing how to synch /send information once collected.
    - Guidance materials for various mobile platforms can be found in Annex I.
    - ***Who:*** *Field Staff, MDC Manager*

12. **Collect Data & Synch / "Send to Server"**
    - All MDC tools allow for offline data collection. It is helpful to set up a 'synching schedule' or plan up front given the lack of connectivity in many locations. There are also options to manually pull data off phones, but this should be done only as a last resort as it increases the possibility that the tool and/or data will be corrupted.
    - ***Who:*** *Field Staff*

13. **Review Data as it arrives**
    - The benefit of MDC is that it allows one to review structured data in near-real time, at point of collection. This allows for more opportunity to course correct unclear wording, to identify trends in data and/or address inconsistencies in data that may be emerging.
    - Once this is done, the digital forms may need to be updated once more (Step 14). Otherwise, move to Step 15.
    - ***Who:*** *PCMMA Team Leads*

14. **Adjust Mobile Forms & Update devices *(optional)* (MDC v2.0)**
    - Repeat Steps 7 – 9 as needed
    - ***Who:*** *MDC Manager*

15. **Analyze Data**
    - It is important to note that the introduction of technology for data collection does not automate all aspects of data analysis by default. As such, as few additional steps must be taken by assessment leads to ensure the data collected actually turns into information that can be analyzed.
    - Receive raw data from MDC Manager
    - Manipulate raw data within Excel
    - Review and discuss any noted inconsistencies with MDC Manager and data collectors
    - ***Who:*** *PCMMA Team Leads*

PILOT IN NIGER

Context: In terms of ICT use and infrastructure, Niger presents an archetypical context for mobile data collection. Electricity and mobile network connectivity are intermittent, staff are distributed across various satellite offices, and travel between field sites is arduous at best. As

such, information exchange between staff and offices (based both in Niger and elsewhere) can be burdensome. Paper-based data collection only exacerbates the situation, requiring a great deal of time, effort, and resources to ultimately get data from point A to point B, or rather, from the "point of data collection" to those who intend to analyze data.

Capacity: The composition and size of a PCMMA team obviously varies per assessment. In this case, there were two teams, each comprised of two Team Leaders and 3-4 local staff, along with an overall assessment leader and the ICT Technical Advisor ("MDC Manager"). Of these 13 total individuals, 9 had prior experience with MDC, with one of these persons having extensive experience managing ICT deployments and building / refining forms for mobile devices. Under normal circumstances, it is less likely to have staff with prior experience facilitating MDC, meaning there is an inherent learning curve to account for amongst mobile users / data collectors, Team Leaders, and the designated MDC focal point.

This pilot presented another unique situation in that the MDC Manager and participating field staff already had a working relationship, having recently developed and deployed another mobile data collection application together. While the introduction of mobile data collection was new for the majority of PCMMA participants, local field staff / data collectors built off this prior experience. Field staff needed little to no training on MDC itself and were able to immediately begin field testing forms and providing feedback on content and structure as the team retained the basic fundamentals from past mobile deployments, such as logging-in, submitting (or "synching") information, and minor troubleshooting of devices.

What Worked

- Near real-time review of data collection despite limited connectivity, through:
    - On-demand "Worker reports" used to troubleshoot individual form submission and data entry per data collector / mobile user;
    - Daily reviews of submission activity per form, to ensure information quantity and quality for each market type, geographic spread, demographic diversity, etc.
    - GPS coordinates of data collection point for every form submitted (when able to capture)

- Capacity Building for Field Staff / Data Collectors
    - Considering their level of experience, the field team was able to skip over initial mobile trainings straight to field testing digital forms and providing feedback on how to improve each;

- Capacity Building for Team Leaders
    - Mobile data collection was new for three of four Team Leaders, so the translation process from paper to digital forms helped those less familiar with MDC to understand how to structure paper forms so they more readily translate to mobile (e.g. adding predictable answer choices versus keeping questions open ended.);
    - Though the field team had prior experience with mobile data collection, the forms in use were all new so Team Leaders still had to introduce form content to staff. Going through this process with forms already on mobile devices helped uncover gaps in clarity and form structure that could be immediately addressed, much before any field testing occurred

- Translating Paper forms to digital
    - While PCMMA questionnaires are fairly qualitative, the distillation process to

mobile Open ended Qualitative Data was addressed to reduce entry error
    - Because one team had prior experience moving from paper to digital forms, their paper forms from onset were designed with mobile formatting in mind. This meant the MDC Manager could more efficiently digitize the forms;
    - Reviewing mobile versions of forms directly with field staff provided more opportunity to streamline questionnaires and calculations, forcing better quality forms that focus only on collecting necessary data points

- Efficiency gains
    - Data collection streamlined and database entry reduced to null – "the use of mobile data collection made analyzing the data very quick and easy" per TL feedback.
    - Questionnaire refinement and remote updates to field staff were easily facilitated through the use of mobile platform
    - Aside from generally speeding up data collection and analysis, one TL noted piloting MDC "contributed to personal skillset of team members" as well.

Challenges

Conceptually, PCMMA is an evolving process that is being piloted in and of itself. It is difficult to overlay support mechanisms that reinforce best practices that are still being defined. Technology is most effective when aims and procedures are in stable state. Without operational and programmatic consistency already established, it is hard to determine the real value add an ICT solution will bring to the process.

The majority of lost time in this pilot occurred during the testing and revision phases of **both** paper and electronic forms. Specific to MDC, not enough time was allotted for the conversion of questionnaires to mobile format and for their testing thereof, meaning that the MDC tools continued to be modified throughout the data collection process—which is far from ideal. This led to some instances of gaps and inconsistencies in data. Various oversights contributed to this: 3 of 4 Team Leaders lacked an initial understanding of how to develop questionnaires that could be easily converted to mobile format; the ICT Specialist did not speak French, making interpretation and conversion of questionnaires to mobile format more time-consuming and leading to additional rounds of revision; and the training and field preparation phases of the assessment did not specifically allot time for testing the questionnaires on mobile devices.

MDC is traditionally used in instances where there is a high volume of data to collect and collate, data collectors are required to conduct complex calculations and decision making in field, and/or data security is of concern. PCMMA / EMMA assessments do not present these traditional use cases; there is a fairly low volume of "low risk" data being collected by individuals who do not directly analyze the information. This assessment's scope was fairly modest by PCMMA/ EMMA standards, focusing on two critical market systems in one geographic area. Each team used a number of questionnaires, two of which—household and market actor surveys for the respective commodities—were digitized. The volume of data collected was fairly low with no more than 60 forms completed in total. While database entry was eliminated by using mobile data collection, the real value add of digital forms should be considered in light of the entire assessment process as it affected various roles and responsibilities. The quality of mobile data collection tools is wholly dependent on substantive inputs and user feedback. Given the available timeline for assessment, this pilot required field testing forms concurrent to live data collection, where ongoing changes were made to some forms throughout the assessment. While not a major hindrance, the benefits of structured data collection can be lost the more

adjustments are made to a single form. As noted above, however, this pilot was unique in that field staff already had familiarity with mobile data collection so the MDC Manager did not have to conduct basic training and instead could focus on form refinement.

Another challenge faced related to multimedia data capture. In addition to basic data collection, MDC allows individuals to take photos, record audio, video, signatures, and a variety of other "extra" data points that paper forms cannot capture. In this instance, we prompted enumerators to take a picture of household & market-based interviewees, especially to capture the context in which each lived or operated in. A major oversight, however, was that the MDC Manager did not adjust the picture quality settings on each mobile device. This meant the pictures taken were of higher quality and therefore, larger file size. So every mobile form that had a picture attached required a strong network connection to be uploaded, which quickly became problematic considering the limited bandwidth we actually had available. This was a strong reminder to always test forms with sample submissions using the exact mobile network in which you will be conducting assessments, as many of these issues will not be uncovered until actually working in a connectivity starved environment (versus an equipped head office).

RECOMMENDATIONS

- ***Assess ICT's real value add*** – For first time MDC users, PCMMA/EMMA may not be the easiest context to trial a new ICT process. Given the relatively low volume of forms collected and short timeline of activities, the added benefit of automated data entry at point of collection does not outweigh the potential pitfalls faced when trying MDC for the first time. While the learning process is not too difficult, the timelines for PCMMA/EMMA assessments are not the most forgiving in terms of learning from errors (which are inherent to first time MDC). If an individual within a team is well versed in MDC already, however, applying the process to PCMMA/EMMA serves as welcome opportunity to review and improve upon drafted questionnaires. While quicker and cleaner data collection using mobile platforms improve efficiency, the distillation process required to transition from paper to digital forms has the most impact on the quality of data collected—forcing both authors and MDC managers to review forms from a usability and data quality standpoint. MDC could also be appropriate in PCMMA/ EMMA assessments that are fairly broad in scope – for example, those that cover broad geographic areas, or in situations of remote management (e.g., where the team is spread out or where security concerns prevent the Assessment Leader from meeting regularly with the team).

- ***Be prepared*** – consider all your hardware needs in advance (before the team's arrival at the training site) so that technical challenges are anticipated and failures are avoided. Aside from the procurement of mobile devices (tablets or phones), solar chargers are advantageous in resource constrained environments. If network connectivity exists in chosen assessment areas, it is also recommended to procure mobile devices that can utilize SIM cards, so users can use both Wi-Fi and mobile data credit to send survey information.

- ***Build sufficient time into the schedule for tool development and testing*** – ideally these steps should take place during the preparatory and training phases of the assessment. This may require adapting the "traditional" 3-day pre-assessment workshop agenda in any number of ways. For example, the assessment leader could provide draft questionnaires based on the expected scope of the study that could be converted to digital format prior to the start of the training; Team Leaders would be required to use these as a starting point. Alternatively, if scheduling permits (especially when the assessment team consists of all national staff), the team could take a break for 3-5 days between training and the start of

field research to allow for field testing of mobile questionnaires by a smaller group of individuals.

- It is important to thoroughly field test questionnaires on paper first and foremost, to make sure all content is clear and prompts for relevant data. The digitization process should only begin once consensus is reached on final versions of paper forms.

- ***Plan inclusively*** – while every questionnaire changes slightly for context, the sooner teams can settle on finalized paper forms, the easier it is for the MDC Manager to complete his/her work. It is important to inform the MDC Manager (or whoever is digitizing forms) of the assessment agenda so that time can be built in for iterative review and refinement.

- ***Plan for language barriers*** – those with language skills will not always be adept at ICT, and vice versa. If the ICT specialist does not speak the language in which the assessment tools are written, the team should appoint a translator or allow additional time for the tool development and revision processes.

- ***Start building capacity early*** – the greater familiarity a MDC Manager has with mobile form structure, data exports, and training, the better quality and more usable resulting mobile forms will be. While there is inherent value in gathering structured data using mobile technologies, one should always be aware of local capacity to support a data collection project in the medium and long term. In addition, it is supremely important to understand why you are collecting data and how you actually intend to use it. More importantly, the more enumerators are sensitized to form content—via paper, mobile, or both—the more likely enumerators will properly conduct surveys and interviews. The introduction of MDC *does not* negate any basic substantive trainings to get enumerators familiar with the information they are charged to collect.

- As suggested by one Team Leader, the transition to mobile-only is not immediate. Enumerators should always "bring paper versions of questionnaires with them as a reference because some forms…are a bit complex, with complicated multi-part questions that are hard to keep track of in electronic form."

- ***Choose tools wisely and with consideration of the context*** (security, connectivity, ease of use to user) – the most successful projects are those that incorporate a broader picture and program design, also taking into account the importance of building local ICT capacity to actually manage mobile deployments. It is encouraged to see the use of mobile technology as a support system – not an end-all solution. This requires identifying areas of added value outside of simply improving workflow efficiency and, perhaps more importantly, ensuring proper support structures are in place to manage the mobile deployment.

- ***Think beyond mobile data collection*** – basic applications of ICT can help move PCMMA/EMMA assessments beyond static data collection. One example is to promote ongoing market data collection via local merchants, using SMS (text-messaging). While EMMA assessments have distinct triggers (i.e. a crisis or shock), PCMMA promotes considerations around preparedness. The more data local individuals can generate in "near-real-time" pre-crisis, the better quality information there will be to infer upon when devising post-crisis-response vis-à-vis market impact. Ongoing local data collection (for example) cannot be considered autonomously, though in that any resulting ICT support requires resources beyond what PCMMA/EMMA timelines normally offer. As such, careful

considerations must be made regarding the level of investment to try new applications of ICT within limited timeframes.

ANNEX I.

Choosing a Mobile Data Collection Platform

All freely available mobile data collection tools are based off Open Data Kit (ODK), an early collaboration between University of Washington and Google. ODK allowed users to easily send structured information to a central cloud-based database ('server'), using a common XForm Standard to structure and share information between locations (i.e. mobile and server). After the initial creation of ODK, many initiatives began to build on top of the framework, resulting in a variety of supported (and unsupported) tools such as formhub, Ona.io, and Kobo Toolbox. When selecting a tool, it is important to note that while functionally, the differences between formhub, Ona, and Kobo (for example) are slight—not all tools are developed and/or supported in the same manner. For example, ODK by itself requires a user to set up their own server and manage data collection yourself; it is not a hosted solution. The original developers of ODK have since branched off into Nafundi, a consultancy that specializes in ODK-based mobile deployments. Similarly, many of the developers from formhub (hosted by Columbia University) creating Ona.io, a soon to be pay-for-service ODK platform (as of 1 October 2015).

Tools Considered for PCMMA-NE

There are a variety of options to choose from, with deciding factors ultimately balancing considerations of user preference, capacity, assessment size, and prioritized needs. One can consult Kopernik's Impact Technology Tracker or the Humanitarian-NOMAD Selection Tool. While both reports are subjective and neither is non-exhaustive, the tools are a good starting point when considering which tool is right for your organization. As the state of industry continues to evolve around these tools, it is important to ensure at base level the reliability and sustainability of the tools chosen. As MDC support communities themselves are fairly ad hoc and voluntary, developing internal capacity around a chosen platform or suite of platforms is also ideal so as to focus E/PCMMA MDC learning around operations rather than nuances of technology. *(See Annex for more on History of MDC Platforms.)*

Description (Server + Mobile App)	**KoBo Toolkit + KoBo Collect**	**Ona.io* + ODK Collect**	**CommCareHQ + CommCare ODK**
Form Creation	KoBoForm Interface or upload XLSform	Upload XLSForm (Manual build in Excel)	Formbuilder Interface or upload XLSform
Form Builder Localization	English	English	English, French
Google Play Store Application for Offline Data Collection	KoBo Collect	ODK Collect	CommCare ODK v2
Offline Application Install	Could Not Find Info	Could Not Find Info	Yes
Device Compatibility	Android OS	Android OS	Android OS; J2ME (non-smartphone)
Offline Data Collection through Browser Form (Not Mobile App)	Free using Enketo	Free using Enketo*	Pay-for feature using CloudCare
Integrated Offline Desktop Data Collection	Free using Enketo	Free using Enketo	Pay-for feature using CloudCare
Manual Data Export from	Yes	Yes	Available

Description (Server + Mobile App)	KoBo Toolkit + KoBo Collect	Ona.io* + ODK Collect	CommCareHQ + CommCare ODK
Device			
Form Library	Uses a Question Library instead of a Form Library	Form Gallery shared across projects	CommCare Exchange Application Library
Wi-fi Direct – mobile to mobile data synching[2]	Could not find info	Could not find info	Available
Case Management / sharing with 2-Way Data Sync to mobile devices [push/pull]	Not Available	Not Available	Available
Workforce / User Reporting	Not Available	Not Available	Available
Email / Scheduled Reports	Not Available	Not Available	Available
Export Formats	XLS, CSV, ZIP, KML, SAV ZIP	XLS, CSV, ZIP, KML, SAV ZIP, CSV ZIP, Google docs, XLS reports	XLS, CSV, ZIP
API Access	Could Not Find Info	Free*	Premium Service
Guidance Documentation	Voluntary Message Board & Google Group	Google Group	Public Help Website & Google Group
Service / Consultancy Packages	Could Not Find Info	Nafundi; Ona.io[3]	Dimagi

Adapted from http://craigappl.github.io/
*Paid Subscriptions will begin 1 October 2015; plan details not yet public

[2] Also called Wi-fi mesh network or 'sneaker net' – to send multiple users' data to a single host device while offline, where that device can then collectively upload information

[3] ODK Collect is maintained by University of Washington. The original developers have created Nafundi, however, a consultancy that specializes in mobile deployments of ODK Collect. Ona.io is also another consultancy group consisting of original developers.